**Course Project Part I**

For this project, you may choose a project that is of interest to you. When selecting a project, avoid picking one that is either too big or too small. For example, do not decide to build a new stadium for your local professional sports team (too big) or to plant your summer garden (too small).You will only be addressing the risk issues in the project so you will not need to be looking at the detail required for a business plan. The scope statement and the WBS are required in addition to the risk management plan. These should comply with the PMBOK requirements. (Note: The ATOM method does also.)  It is important to pick a project that you understand so that you will be able to create the risk management plan that is realistic with sufficient detail where your contingency plans will be relevant.  Since you will need to create a risk management plan, your project should be somewhat risky.

1. Create a risk management plan for your project. To do this, you must first create a scope and a WBS for your project. These can be basic as our concentration is on the risk management plan and not the overall project planning.
2. You will perform and discuss risk management planning as defined in the Lessons. This will include the steps that follow.
3. Identify risks for your project, including any issues that may impede or impair the completion of the project. Discuss the process you used, that is your method. You must identify at least 5 positive and 15 negative risks.  These should be actual risks in your project.
4. Prioritize the risks by performing qualitative risk analysis. Discuss the process and method you used and how you arrived at your results.
5. Perform risk response planning for your project by creating detailed risk response plans for those risks needing responses. (The high priority ones.) This should include both proactive responses and reactive contingency plans as appropriate.

Your paper must include a proper **risk matrix or risk register** to completely meet the requirements for this assignment.

**Sample Outline of Typical Course Project Paper Part I**

1. Title Page
2. Table of Contents
3. Introduction
4. Risk Management Planning (Including Scope and WBS)
5. Risk Identification
6. Qualitative Risk Analysis
7. Risk Response Planning
8. Summary and conclusion about your process.

The discussion write up regarding the identified risks should be from 5-8 pages in length not including the cover page, TOC, and appendix. Spacing should be 1 ½ or double.  Note that this page length is a guideline**.**

**Suggestions for selecting your course project**

For this project, you may choose a project that is of interest to you. It is much easier to work with a project where you already know about the topic and do not have to research all the facts.

**Important:** If you plan to use a project you have used in another course modified for this course that is ok but you must reference the past report as you would any other reference material.

When selecting a project, avoid picking one that is either too big or too small. For example, do not decide to build a new stadium for your local professional sports team (too big) or to plant your summer garden (too small). You must be able to create a reasonable WBS and then identify 20 risks to work with. Too small and you can’t generate those and too big and the task becomes too complex and there will be additional work for you.

You will only be addressing the risk issues in the project so you will not need to be looking at the detail required for a business plan. The only part of a project plan you need are:

         a scope statement

         a WBS for your project

         A risk management plan.

It is important to pick one that you understand so that you will be able to create the scope, the WBS, and the risk management plan that is realistic with sufficient detail where your contingency plans will be relevant.

Your project should be somewhat risky. As an example a typical house construction project is pretty risk free. Constructing a nuclear reactor is plenty risky but too complex. The answer is somewhere in between. Many business developments have risks as is apparent from the high percentage that fail.

You can pick from a project you have or have seen done at your job, in your personal life, or just one you have read about. All the data can be fictitious as long as it is reasonable. The work will be evaluated based upon how well you apply the process to the risk management plan and not the facts and figures you use.

**Course Project Part II**

For this part, you will be creating two decision trees concerning specific risks or events from the project you developed in part 1. The first one will be a decision tree used to make a decision. You will be calculating an expected value based upon this decision tree. The second will be for a basic risk or event where you will be creating a fault or event tree illustrating what makes up the fault or event. With each of these, you will need to discuss the process and results of your tree.

The risks or events you use will be from the project you used in the part one. You will need to start the report with a short introduction of that project so that there is continuity and the reader will understand the events and risks being discussed. You do not have to include part one in your part two report.

Details:

Create one decision tree with an expected value and a fault or event tree that would support the exploration of risk for the project you used for part one of the course project. (That is two trees in all.)  Provide a one paragraph project description of the part 1 project but you do not have to repeat all the other information in this part.

         The decision tree must be created to support a major risk-related decision likely to be faced by the project. The calculation of expected values is a requirement of this project.

         The fault or event tree should offer at a minimum a listing of potential risks and impacts in the event of a smaller failure.

For example, a smaller failure could be the loss of water pressure or a fire in a construction project rather than examining what risk was involved with the collapse of the construction project.

Write a discussion of the risks that supports the fault tree, event tree, or decision tree that has been created. Make a separate write up for each of these smaller risks associated with the fault tree or event trees. Your paper should have a general introduction that should introduce the decision tree and fault or event trees that will be discussed, and then the paper should have a discussion regarding each tree. See the sample outline below for details.

The part 2 paper regarding the identified risks and decision trees should be from six to ten pages in length. Note that this page length is a guideline.

**At least** **three authoritative, outside references** are required (anonymous authors or web pages are not acceptable). These should be referenced where used in the paper and listed on the last page titled, Works Cited.

Risks such as “project is over budget” or “project does not meet schedule” are too broad. Be specific.

**Comments on previous assignments on how to create an acceptable tree and project paper (FYI)**

Each fault or event tree should offer at a minimum a listing of two or more potential risks and impacts in the event of two smaller failures. (This means for each tree you will have at a minimum two sub-faults with multiple causes for each of them.)

Use “and” and “or” gates properly. Understand the difference. When you use an ‘and’ gate it indicates that it take both of the conditions for the fault to occur. If either of the conditions could cause a problem this indicates the use of an ‘or’ gate.

You should have at least two options under each gate. There is no reason for a gate if there is only one option.

There are examples and templates in doc sharing.

You need to select specific faults to use in the tree. General examples of faults are too broad for the fault tree to provide a comprehensive evaluation of the possible causes.

The graphics for the tree do not have to be artist professional quality but they do need to be student professional. A table is not sufficient. If you use screen shots be sure you crop them so that only the tree is included not all the computer menus and etc.

When a template is provided or an example it is not meant to be copied. If you are not doing a construction project, your headings should not be “construction project” just because the example says that.

This is a risk management course. The engineering solutions to the problems on these projects are not the answer that you should be developing. The development is of the risk management system and process for your specific project.

You should have a conclusion that should focus on the risk management process and use of fault trees. Some conclusions on the project results are ok.

**Sample Outline of Typical Course Project Paper Part II**

*Course Project Part II*

1. Title Page
2. Introduction including brief project description (from part 1)
3. Decision Tree Analysis and Expected Value Calculation
4. Discussion of Decision Tree
5. Fault or Event Tree
6. Discussion of Fault or Event Tree
7. Summary and Conclusions
8. Works cited

**Objective**

The goal of the project is to select a project and then to create and detail a risk management plan that would support that project. In addition, it will demonstrate the use of decision trees and expected values.

**Guidelines**

* The Course Project is broken down into two parts. The first part is due by the end of **Week 4**. The final part 2 is due by the end of**Week 6**.
* Papers must be in 10, 11, or 12 point font, 1 1/2 or double-spaced, and must include a cover page, table of contents, introduction, body of the report, summary or conclusion, and works cited.
* Even though this is not a scientific-type writing assignment, and is mostly creative in nature, references are still very important. At least three authoritative, outside references are required (anonymous authors or web pages are not acceptable). These should be listed on the last page, titled Works Cited.
* Appropriate citations are required.
* All DeVry University policies are in effect, including the plagiarism policy.
* The first part of the assignment is due during Week 4 of this course. The final completed project is due during Week 6 of this course.
* Any questions about this paper may be discussed in the weekly Q & A Discussion topic.
* The Course Project will be graded on quality of research topic, quality of paper information, use of citations, grammar, and sentence structure.

**Milestones**

Week 1—Project selection
Week 2—Begin work on the Project Risk Management Plan Part I for the selected project.
Week 3—Continue work on the Project Risk Management Plan Part I for the selected project.
Week 4—Submit Course Project Part I
Week 5—Complete first draft of final paper (Course Project Part II)
Week 6—Submit Course Project Part II

**Grading Rubrics**

**Grading Rubric for Part I**

| **Category** | **Points** | **%** | **Description** |
| --- | --- | --- | --- |
| Rick Management Plan | 65 | 54% | Risk management plan for selected topic, including content of the identification, discussion, contingencies, understanding, and ranking of all risks for the project |
| Documentation and Formatting | 10 | 8% | Formatting of paper |
| Organization and Cohesiveness | 10 | 8% | Organization of paper |
| Editing | 10 | 8% | Title page, spelling, grammar, style |
| Explanatory Text | 25 | 22% | Clarity of discussion of risk management plan |
| **Total** | 120 | 100% | A quality paper will meet or exceed all of the above requirements. |

**Grading Rubric for Final Course Project (Part II)**

| **Category** | **Points** | **%** | **Description** |
| --- | --- | --- | --- |
| Cover Page, TOC | 5 | 4% | Cover page and table of contents |
| Documentation and Formatting | 5 | 4% | Supporting documentation and formatting of paper |
| Works Cited | 10 | 8% | Accuracy of citations and works cited section |
| Introduction/Conclusion | 10 | 8% | Clarity of introduction and conclusions |
| Organization and Cohesiveness | 5 | 4% | Organization of paper |
| Flow of paper | 5 | 4% | How well did the topics flow together and how well did the elements of risk interlock together? |
| Content | 24 | 20% | How well did the content support the overall risk management plan? |
| Event and Decision Tree | 56 | 48% | Event and decision tree for selected project, Execution and discussion. |
| **Total** | 120 | 100% | A quality paper will meet or exceed all of the above requirements. |

**Best Practices**

Your report should include the following components.

* **Cover page**: Include whom you prepared the paper for, who prepared it, and the date.
* **Table of contents**: List the main ideas and section of your paper and the pages in which they are located. The illustrations should be included separately.
* **Introduction:**Use a header on your paper. This will indicate you are introducing your paper.

The purpose of an introduction or opening is to

1.     introduce the subject and why the subject is important;

2.     preview the main ideas and the order in which they will be covered; and

3.     Establish a tone of the document.

Include in the introduction a reason for the audience to read the paper. Also, include an overview of what you are going to cover in your paper and the importance of the material. (This should include or introduce the questions you are asked to answer on each assignment.)

* **Body of your report**: Use a header titled with the name of your project (e.g., The Development of Hotel X—A World Class Resort). Then proceed to break out the main ideas. State the main ideas, state major points in each idea, and provide evidence. Break out each main idea you will use in the body of your paper. Show some type of division like separate sections that are labeled; separate group of paragraphs; or headers. You would include the information you found during your research and investigation.
* **Summary and conclusion**: Summarizing is similar to paraphrasing but presents the gist of the material in fewer words than the original. An effective summary identifies the main ideas and major support points from the body of your report. Minor details are left out. Summarize the benefits of the ideas and how they affect the tourism industry.
* **Work cited**: Use the citation format as specified in the Syllabus.
* **Three-step process**: Apply a three-step process of writing: plan, write, and complete.
* **Outline**: Prepare an outline of your research paper before you go forward.
* **Start with a draft**: Complete a first draft and then go back to edit, evaluate, and make any changes required.
* **Visuals:** Use visual communication to further clarify and support the written part of your report. You could use risk charts or tables, example graphs, diagrams, photographs, flowcharts, maps, drawings, animation, video clips, pictograms, tables, and Gantt charts.

*Course Project Part II*

1. Title Page
2. Introduction including brief project description (from part 1)
3. Decision Tree Analysis and Expected Value Calculation
4. Discussion of Decision Tree
5. Fault or Event Tree
6. Discussion of Fault or Event Tree
7. Summary and Conclusions
8. Works cited

Comments on grade:

Decision Tree Analysis and Expected Value Calculation

The purpose of the decision tree with the expected value calculation is to produce a value from each of the options. Then based upon the value that maximizes the decision you will make your selection. You did not calculate a value (I think you were looking for the minimum cost of the purchase) which would help you make the decision. There were no calculations.

Fault tree:

The left hand branch of your event tree used all and gates. It appears to me that in these cases either of the two choices could result in the decision. As an example “drunk driving” does not required children to be detrimental.

 Expected value/ decision tree

You did not do an expected value using options and probabilities. You just picked the lowest base price. This is not expected value. The decision tree did not have the required levels.

 Your expected value only included the base cost of the vehicle. The result will always be the cheaper purchase price. For the process to work there must be cost other than purchase price such as maintenance cost. These are real balances for the cheaper purchases.

Screen shots are ok but you should crop the extraneous materials such as boarders from them. This can be done in word by double clicking them and finding crop in the menu.

Your decision tree did not calculate expected values. The numbers you calculated were just sums of the cost of the options and did not use statistically methods to evaluate their expected values.

The fault tree was laid out ok but you used a lot of and gates. The options you used looked like either of them could cause the fault.

 Your decision tree with evm should include both options. There may be a 90% chance of failure but you have to calculate the value when there is the 10% success. This will add value to the purchase and subtract from the lease. It may not change the conclusion but will be the accurate evaluation.